


NKANGALA DISTRICT MUNICIPALITY
BULK WATER SUPPLY AND STORAGE AT HLALANIKAHLE AND EXTENSION 5
SCHEDULE 1 : PRELIMINARY & GENERAL

ITEM NO	PAYM. REF.	DESCRIPTIN	UNIT	QTY	RATE	AMOUNT R
	SANS 1200AA	<u>GENERAL</u>				
1.1	8.3	<u>FIXED CHARGE AND VALUE-RELATED ITEMS</u>				
1.1.1	8.3.1	Contractual Requirements	sum	1		
1.1.2	8.3.2	<u>Establish facilities on site</u>				
1.1.2.1	8.3.2.1	i) <u>Facilities for Engineer</u>	Sum	1		
		a) Furnished offices (1 no)				
1.1.2.2		b) Name Boards (2 no)	No	2		
1.1.2.2	8.3.2.2	ii) <u>Facilities for Contractor</u>				
		a) Offices and storage sheds	sum	1		
		b) Living accommodation	sum	1		
		c) Ablution and latrine facilities	sum	1		
		d) Tools and equipment	sum	1		
		e) Water supplies, electric power and communication	sum	1		
		f) Dealing with water	sum	1		
		g) Access	sum	1		
		h) Plant	sum	1		
1.1.3		<u>Occupational Health and Safety</u>				
		a) General safety & safety equipment	sum	1		
		b) Preparation of the Health & Safety Plan	sum	1		
		c) Providing of method statement and complying with requirements of the Environmental Management Plan	sum	1		
1.1.4	8.3.3	Other fixed charge obligations	sum	1		
1.1.5	8.3.4	Removal of site establishment	sum	1		
	SANS 1200AA					
1.2	8.4	<u>TIME RELATED ITEMS</u>				
1.2.1	8.4.1	Contractual requirements	sum	1		
1.2.2	8.4.2	<u>Operations and maintenance of facilities on site</u>				
1.2.2.1	8.4.2.1	<u>Facilities for Engineer</u>				
		a) Furnished offices (1 no)	Sum	1		
		b) Name Boards (2 no)	No	2		
CARRIED FORWARD						

<i>Tenderer</i>	<i>Witness 1</i>	<i>Witness 2</i>	<i>Employer</i>	<i>Witness 1</i>	<i>Witness 2</i>

	Project No: 185527 CONSTRUCTION OF BULK WATER SUPPLY AND STORAGE AT HLALANIKAHLE & EXTENSION 5
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NKANGALA DISTRICT MUNICIPALITY
BULK WATER SUPPLY AND STORAGE AT HLALANIKAHLE AND EXTENSION 5
Schedule 1
Preliminary & General
SCHEDULE 1 : PRELIMINARY & GENERAL

ITEM NO	PAYM. REF.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
BROUGHT						
1.2.2.	8.4.2.	<u>Facilities for Contractor</u>				
		a) Offices and storage sheds	sum	1		
		b) Living accommodation	sum	1		
		c) Ablution and latrine facilities	sum	1		
		d) Tools and equipment	sum	1		
		e) Water supplies, electric power and	sum	1		
		f) Dealing with water	sum	1		
		g) Access	sum	1		
		h) Plant	sum	1		
1.2.3		<u>Occupational Health and Safety</u> Allow for compliance with all aspects of the OH&S Act No. 85, 1993 including: risk assessment; provision of safety plan; appointment of safety officer; safety training (induction) of workforce and notification(s) to the Department of Labor	sum	1		
1.2.4	8.4.3	Supervision for duration of the construction	sum	1		
1.2.5	8.4.4	Company and Head Office overhead costs for the duration of the Contract	sum	1		
1.2.6	8.4.5	Other time related obligations	sum	1		
1.3	8.5	<u>SUMS STATED PROVISIONALLY BY THE ENGINEER</u>				
1.3.1		Employment of a Community Liaison Officer for the duration of the contract. Rate as per the current Municipal approved rate. Allow a budget amount of R7000 / month	Prov Sum	1		R 56 000,00
1.3.2		Extra over Item 1.3.1 for the administration of payment	%	R 56 000,00	10%	R 5 600,00
1.3.3		Specific control tests as ordered by the Engineer	Prov Sum	1	R 50 000,00	R 50 000,00
TOTAL SCHEDULE 1 CARRIED FORWARD TO SUMMARY						

Tenderer

Witness 1

Witness 2

Employer

Witness 1

Witness 2



Project No: 185527

**CONSTRUCTION OF BULK WATER SUPPLY AND STORAGE AT
HLALANIKAHLE & EXTENSION 5**

NKANGALA DISTRICT MUNICIPALITY

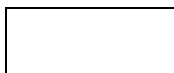
Schedule 2

BULK WATER SUPPLY AND STORAGE AT HLALANIKAHLE AND EXTENSION 5


SCHEDULE 2 : PIPEWORK

Pipework

ITEM NO	LI	PAYM. REF.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
2.1		SABS 1200 DB	<u>EARTHWORKS PIPE TRENCHES</u>				
2.1.1	LI	8.3.1(a)	Clear vegetation and trees of girth up to 1 m	m	100		
2.1.2	LI	8.3.1(b)	Clear trees of girth over 1 m	no	10		
2.1.3		SABS 1200C 8.2.5	Remove and re-erect Fences	m	100		
2.2			<u>EXCAVATION</u>				
2.2.1	LI	8.3.2a)	Excavation in all materials for trenches for water pipes up to 200mm diam. Rates to include backfill, compact and dispose of surplus materials. a) Up to 1,5m deep	m	2200		
	LI		b) Over 1,5 up to 2,5m deep	m	20		
			c) Over 2,5 up to 3,5m deep (Provisional)	m			Rate Only
2.2.2		8.3.2b)	<u>Extra-over item 6.2.1 for</u> a) Intermediate excavation	m³	2100		
			b) Hard rock excavation	m³	350		
2.2.3	LI	8.3.2c)	Excavate and dispose of unsuitable material from trench bottom (Provisional)	m³	3140		
2.2.4	LI	8.3.3.1b)	Import backfill material from designated borrow pits (Provisional)	m³	325		
2.2.5	LI	8.3.3.3	<u>Extra-over items 6.2.1 a) to c) incl. for (prov):</u> Compaction of trenches across road reserves	m³	300		
2.2.6		8.3.3.4	<u>Overhaul</u> a) long overhaul over 0,5 km (Provisional)	m³.km	2250		
2.3		SABS 1200LB	<u>PIPE BEDDING</u>				
2.3.1	LI	8.2.1	<u>Selected granular material for bedding & cradle</u> a) Trench excavation	m³	230		
	LI	8.2.2.2	b) Borrow pits (Provisional)	m³	100		
2.3.2	LI	SABS 1200LB 8.2.1	<u>Provision of selected fill material for pipe blanket</u> a) Trench excavation	m³	460		
	LI	8.2.2.2	b) Borrow pits (Provisional)	m³	200		
2.3.3	LI	8.2.3	<u>Concrete bedding cradle</u>	m³	5		
2.3.4	LI	8.2.4	<u>Encasing of pipes in concrete</u>	m³	15		
2.3.5		8.2.5	<u>Overhaul for imported material for bedding cradle and selected fill blanket (Provisional)</u>	m³.km	600		
CARRIED FORWARD							



Tenderer


Witness 1


Witness 2


Employer


Witness 1


Witness 2



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**CONSTRUCTION OF BULK WATER SUPPLY AND STORAGE AT
HLALANIKAHLE & EXTENSION 5**

NKANGALA DISTRICT MUNICIPALITY

Schedule 2

BULK WATER SUPPLY AND STORAGE AT HLALANIKAHLE AND EXTENSION 5

SCHEDULE 2 : PIPEWORK

Pipework

ITEM NO	LI	PAYM. REF.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
BROUGHT FORWARD							
2.4		SABS 1200L	<u>PIPES AND FITTINGS</u>				
2.4.1		8.2.1	Supply, handle, lay, and bed on Class C bedding, test, and disinfect uPVC water supply mains with mechanical rubberising integrating coupling to SABS 966				
	LI		a) 110 mm Ø uPVC class 9 pipeline	m	150		
	LI		b) 160 mm Ø uPVC class 9 pipeline	m	1900		
2.4.2			Supply, lay and bed Flanged steel pipes on Class C bedding 300WA steel, t=4,5mm (Flanges SANS1123 -1000)				
			a) 100 mm dia	m	150		Rate only
			b) 150 mm dia	m	1900		Rate only
		8.2.2	Supply, lay, and bed on Class C joint, incl cut pipes to length where required, test and disinfect: Extra-over items 6.4.1 a to c for pipelaying				
			Long radius bends uPVC Class 16 couplings				
2.4.3	LI		<u>110 mm Ø uPVC</u>				
			a) 90° bend	no	5		
			b) 45° bend	no	6		
			c) 22.5° bend	no	10		
			d) 11.25° bend	no	10		
2.4.4	LI		<u>160 mm Ø uPVC</u>				
			a) 90° bend	no	9		
			b) 45° bend	no	7		
			c) 22.5° bend	no	10		
			d) 11.25° bend	no	15		
2.4.5	LI		<u>Tees CI Class 16 socket ended incl.</u>				
			a) 160 x 160 mm	no	3		
			b) 250 x 160 mm	no	3		
			b) 160 x 75 mm	no	3		
2.4.6	LI		<u>Hydrant Tees CI Class 16 socket ended incl.</u>				
			a) 200 mm	no	1		Rate only
2.4.7			<u>Reducers (uPVC)</u>				
			a) 250 x 200 mm	no	2		
			b) 250 x 160 mm	no	2		
			b) 250 x 110 mm	no	2		
		8.2.3	Extra over 6.4.1 for the Supplying, Fixing and bedding of Valves				
			Gate valves Cast Iron for uPVC (Right hand closing - flanged) "Hawle, AVK"				
			or similar approved complete with VJ flange adaptor or CI flange adaptor				
2.4.8	LI						
			a) 110 mm	no	5		
			b) 160 mm	no	5		
			c) 250 mm	no	7		
CARRIED FORWARD							

Tenderer

Witness 1

Witness 2

Employer

Witness 1

Witness 2



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**CONSTRUCTION OF BULK WATER SUPPLY AND STORAGE AT
HLALANIKAHLE & EXTENSION 5**

NKANGALA DISTRICT MUNICIPALITY

Schedule 2

BULK WATER SUPPLY AND STORAGE AT HLALANIKAHLE AND EXTENSION 5

SCHEDULE 2 : PIPEWORK

Pipework

ITEM NO	LI	PAYM. REF.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
BROUGHT FORWARD							
2.4.9	LI		<u>Scour valves</u> (Right hand closing - flanged - drilled SABS 1123 Table 16 - complete with scour-tee, couplings and fittings)- all pipe items and fittings to be priced as per dwg 303	no	3		
			a) 100 mm valve on 160mm uPVC pipe				
			b) 100 mm valve on 250mm uPVC pipe	no	1		Rate Only
2.4.10	LI		<u>Air valves</u> (Double acting - complete with fittings and couplings as per drawing) "Ventomat" or similar approved- all items to be priced as per dwg 303	no	3		
			b) 80mm Ø	no	1		Rate Only
2.4.11	LI	8.2.13	Isolating / air valve box: Complete as per Drawing 303	no	20		
2.4.12	LI	8.2.13	Scour valve chamber: Complete as per Drawing 303	no	4		
2.4.13	LI	8.2.11	Thrust / Anchor Blocks: As per Drawings	no	90		
			a) Concrete volume < 0,8m³				
			b) Concrete volume > 0,8m³	no	30		
2.5	SABS 1200L		GENERAL ALLOWANCES				
2.5.1			Connect new bulk pipelines to existing bulk pipelines or disconnect existing pipes from the existing	Prov sum	1		R 200 000,00
2.5.2			Excavation by hand to locate Existing ring main connections- including backfilling and compaction installation of valves	m³	10		
2.5.3			Existing services to be protected/ relocated or replaced as ordered by the Engineer	Pov Sum	1		R 300 000,00
2.5.4			Allowance for 15m long horizontal drilling (300mm) in intermediate material, HDPE RHO Struct Sleeve, 300mm stainless steel clamps, inclusive of site establishment and installation.	No	2		
TOTAL SCHEDULE 2 CARRIED FORWARD TO SUMMARY							

Tenderer

Witness 1

Witness 2

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Employer

Witness 1

Witness 2

C2.2: Bill of Quantities



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**CONSTRUCTION OF BULK WATER SUPPLY AND STORAGE AT
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NKANGALA DISTRICT MUNICIPALITY

Schedule 3

BULK WATER SUPPLY AND STORAGE AT HLALANIKAHLE AND EXTENSION 5

Boreholes

SCHEDULE 3 : BOREHOLE

ITEM NO	PAYM. REF.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
3.		BOREHOLE SITING A registered geologist to performs borehole siting in accordance with SANS 10299 by conducting geological and hydrogeological assessments, analyzing subsurface formations, and selecting optimal drilling locations.				
3.1	SANS 10299-1	a) Borehole siting, GIS, data capturing and reporting supervision of the Geo-hydrologist/Geo-hydrological Engineer	No	1		
3.2	SANS 10299-2	BOREHOLE DRILLING & EQUIPPING				
3.3		AIR PERCUSSION DRILLING		100		
3.3.1		a) Drilling up to 8.5"(0-50m)	m			
3.3.2		b) Drilling up to 10"(0-100m)	m	100		
3.4		Extra-over item 3.3 for (to be substantiated by drilling logs of geohydrologist)				
3.4.1		a) 100 to 120 plus 20%	m			Rate Only
3.4.2		b) Drilling hard Dolorite, Nortite formations plus 15%	m			Rate Only
3.4.3		c) Drilling Quarzite formations plus 45%	m			Rate Only
3.4.4		d) Drilling loose formations boulders and mud	m			Rate Only
3.7		PERFORATED FACTORY CASING				
3.7.1		a) Casing 177mm OD x4mm	m	60		
3.8		OTHER DRILLING RATES				
3.8.1		a) Borehole Reaming	m	60		
3.8.2		b) Silica Gravel 3-7mm 40 Kg	bag	4		
3.8.3		c) Bentonite bag 40 kg	bag	4		
3.8.4		d) Bentonite drum 20L bag 40 kg	drum	2		
3.8.5		e) Bentonite sanitary seal	p/bh	2		
3.8.6		f) Drill and drive	p/bh	2		
3.8.7		g) Drilling foam	p/bh	2		
3.8.8		h) Supply of drilling water.	L	5000		
3.8.9		i) Formation stabilizer(supply, deliver, install)	p/bh	2		
3.8.10		j) Borehole disinfection	p/bh	2		
3.8.11		k) Borehole protection boxes	p/bh	2		
CARRIED						

Tenderer

Witness 1

Witness 2

Employer

Witness 1

Witness 2



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CONSTRUCTION OF BULK WATER SUPPLY AND STORAGE AT HLALANIKAHLE & EXTENSION 5

NKANGALA DISTRICT MUNICIPALITY

BULK WATER SUPPLY AND STORAGE AT HLALANIKAHLE AND EXTENSION 5

SCHEDULE 3 : BOREHOLE

Schedule 3

Boreholes

ITEM NO	PAYM. REF.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
BROUGHT FORWARD						
3.9	SANS 10299-5	<u>Equipment and installation</u>				
3.9.1		a) Wet End Submersible Pump up to(10l/s 220@m).	No	3		
3.9.2		b) Submersible pump motor to deliver as per pump specification	No	3		
3.9.3		c) Box casing for control panel and Ancillaries	No	3		
3.9.4		d) Supply and Installation of 4 Core Submersible Cable	m	200		
3.9.5		e) Splicing kit	No	3		
3.9.6		f) Safety Cable @ 100m	No	3		
3.9.7		g) Galvanized Baseplate and Consumables	p/bh	3		
3.9.8		h) Non-Return valve (80mm dia)	p/bh	3		
3.9.9		j) HDPE CL12 @63mm water supply	m	200		
3.9.10		m) UPVC Fittings and Consumables to connect to 63mm dia to	Sum	1		
3.9.11		o) Borehole Probe	No	3		
3.9.12		p) Supply and Install control panel with all cabling and wiring	No	3		
3.9.13		q) Galv inlet Pipe - 80mm dia x 50m, including fittings and gate valve	Sum	1		
3.10		MISCELLANEOUS				
		Borehole Yield and Water Quality Testing: [Borehole development. Step test 12-hour constant discharge				
	SANS 10299	100m/borehole) under the supervision of the Geo-hydrologist/Geo-hydrological Engineer]	p/bh	2		
		Supply and install Communal Standpipes, 6x Taps with anti-theft systems, quick couplers & flexible supply pipes, spotwelded bolts, nuts & pipes.	No	1		
3.11	SANS 1200	Allow for water treatment facilities, subject to engineers' approval.	Prov Sum	1		R 650 000,00
3.12		Supply and installation of telemetry system	Prov Sum	1		R 500 000,00
3.13		Allowance for Booster pumps after treatment works inclusive of all Pipeworks, pumping to elevated tank.	Prov Sum	1		R 350 000,00
3.14	SANS 10299-5	<u>Supply and install the following electrical equipment</u>				
3.14.1		Supply and install overhead lines to supply power to boreholes	Prov Sum			R 500 000,00
3.14.2		Allowance for two 50kva transformers i n c l cabling	Prov Sum	1		R 200 000,00
3.14.3		Overhead charges and profit on (3.11.-3.14.3)	%	1		
TOTAL SCHEDULE 3 CARRIED FORWARD TO SUMMARY						

Tenderer

Witness 1

Witness 2

Employer

Witness 1

Witness 2



Project No: 185527

**CONSTRUCTION OF BULK WATER SUPPLY AND STORAGE AT
HLALANIKAHLE & EXTENSION 5**

**ANGALA DISTRICT MUNICIPALITY
BULK WATER SUPPLY AND STORAGE AT HLALANIKAHLE AND EXTENSION 5
SCHEDULE 4: SECTIONAL STEEL TANK**

Schedule 4
Sectional Steel Tank

ITEM NO	PAYM. REF.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
4.1	SABS1200 C	SECTIONAL STEEL TANK				
		<u>SITE CLEARANCE:</u>				
4.1.1	8.2.1	Clear and grub site for steel water tank	m ²	210		
4.2	SANS	<u>EARTHWORKS</u>				
4.2.1		<u>EXCAVATIONS FOR STRUCTURES:</u>				
4.2.1.1	8.3.2	a) Excavation in all materials for tank foundations and use for backfill, compacted to 95% AASHTO density, or embankment or dispose of surplus materials as instructed	m ³	210		
		Extra-over item 3.2.1.1 for				
4.2.1.2	8.3.2	a) Intermediate excavation	m ³	10		
4.2.1.3		b) Hard rock excavation	m ³	10		
4.2.2	SANS1200D	<u>BACKFILLING AND BEDDING</u>				
4.2.2.1	8.3.4	a) Imported backfill material from designated borrow pit, compact to 95% AASHTO density (unless otherwise indicated) and finishing off of area, :	m ³	5		
4.2.2.2		b) Backfilling (150mm layer) under structures and compacted to 98% mod. AASHTO max. density	m ³	2		
4.3	SABS 1200G 8.1.3	<u>CONCRETE</u>				
4.3.1	8.4.3	Grade 15/20 mass concrete for pipe support blocks and / or as instructed by the Engineer.	m ³	10		
4.3.2		Grade 25/20 strength reinforced concrete in:				
4.3.3		a) Foundations and stub columns	m ³	128		
		b) Grouting under base plate ABE Duragrout or similar approved	m ³	9		
4.4	SANS 1200G	<u>FORMWORK:</u>				
4.4.1	8.2.2	a) Smooth vertical formwork to tank foundations	m ²	128		
4.5	SANS	<u>UNFORMED SURFACE FINISHES:</u>				
	8.4.4a	<u>Wood float finish</u>				
4.5.1	SANS 1200G SANS	a) Top of foundations	m ²	64		
4.6		<u>REINFORCEMENT</u>				
		<u>Mild /steel bars</u>				
4.6.1	8.3.1	a) 8mm	t	4		
4.6.2	8.3.1	<u>High tensile steel bars</u>				
4.6.2		a) 12mm	t	12		
4.6.3		b) 16mm	t	4		
	8.3.2	<u>High tensile steel mesh</u>				
4.6.4		a) Ref no 395	m ²	0		Rate Only
4.6.5		b) Ref no 888	m ²	0		Rate Only
CARRIED FORWARD						

Tenderer

Witness 1

Witness 2

Employer

Witness 1

Witness 2



Project No: 185527

**CONSTRUCTION OF BULK WATER SUPPLY AND STORAGE AT
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NKANGALA DISTRICT MUNICIPALITY

BULK WATER SUPPLY AND STORAGE AT HLALANIKAHLE AND EXTENSION 5

SCHEDULE 4: SECTIONAL STEEL TANK

Schedule 4

Sectional Steel Tank

ITEM NO	PAYM. REF.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
BROUGHT FORWARD						
4.7	SABS 1200L					
4.7.1		PIPE WORKS				
		a) 150mm steel for inlet pipe complete with valves and	Sum	1		
4.7.3		b) 100mm steel for scour pipe complete with valves and chamber	Sum	1		
4.7.4		c) 150mm steel for outlet pipe complete with valves and	Sum	1		
4.8		d) 100mm steel for overflow pipe complete with valves and	Sum	1		
		MISCELLANEOUS				
4.8.1		Supply, deliver to site and install a 1000KI galvanized elevated sectional steel tank on 15m steel stand (15m high), complete with, galvanized roof covers 1.2mm thick, mechanical water level indicator, internal & external access ladder, landing platform complete with roofing and handrailing complete with all galvanized steel pipe (inlet, outlet, overflow, scour)	Sum	1		
4.8.2		Outlet valve chamber supply and install as per drawing no: GS-185527-W-303	No	3		
TOTAL SCHEDULE 4 CARRIED FORWARD TO SUMMARY						

Tenderer

Witness 1

Witness 2

Employer

Witness 1

Witness 2



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**CONSTRUCTION OF BULK WATER SUPPLY AND STORAGE AT
HLALANIKAHLE & EXTENSION 5**

NKANGALA DISTRICT MUNICIPALITY					Schedule 5	
BULK WATER SUPPLY AND STORAGE AT HLALANIKAHLE AND EXTENSION 5					Water Treatment Building	
SCHEDULE 5 : WATER TREATMENT BUILDING						
ITEM NO	PAYM. REF.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
5	PU	SECTION:				
5,1	SABS 1200D	WATERTREATMENTBUILDING				
5.1.1	8.1	EARTHWORKS:				
	8.2 8.3.3	Restricted excavations in all materials up to 1.5m deep for strip foundations	m³	18		
	PSD6.5					
5.1.2		Extra over Item 10.1.1 for: intermediate excavation	m³	4		
5.1.3		Hard rock excavation	m³	2		
5.1.4	PSD6.9	Scarify and compact in-situ surface, in G5 and G7 material, in 150mm layer to 90% Mod AASHTO maximum density.	m²	24		
5.1.5	8.3.9	Extra over Items 101.1.1 to 101.1.4 for backfilling around structures:				
5.1.5.1	8.3.9 PSD6.9	Backfill under surface bed with suitable (at least G7) material previously excavated and stockpiled and compact to 93 % Mod AASHTO maksimum density at o.m.c in 150mm layers	m³	8		Rate only
5.1.6	8.3.4	Backfill under surface beds with G7 imported material from commercial source and compact to 93% Mod AASHTO maksimum density at o.m.c in150mm layers	m³	6		
5,2	SABS 1200G	CONCRETE				
	8.1.3	Grade 25/20 concrete in:	m³	6		
5.2.1	8.4.3	600mm x 250 mm strip foundations	m³	2		
5.2.2		Concrete surface bed	m³	4		
5.2.3		Concrete apron around building	m³	4		
5.2.4		25mm Screed on top of surface bed	m²	18		
5,3	8.2.2	FORMWORK Smooth narrow width vertical formwork to the side of apron	m²	6		
5.3.1	8.4.4	UNFORMED SURFACE FINISHES				
5,4	PSG6.4	Wood float finish	m²	58		
5.4.1	8.5	JOINTS				
5,5	PSG6.5	Expansion joints in concrete apron	m	16		
5.5.1		BRICKWORK AND MASONRY				
5,6		230mm Brick walls in facebrick to external faces and general-purpose bricks to internal faces	m²	90		
5.6.1		115mm Brickwalls in general purpose bricks to internal walls	m²	14		
5.6.2		115mm Face brick beamfilling between trusses	m²	20		
5.6.3		Precast concrete lintels above windows	m	8		
5.6.4		12mm Thick smooth plaster finish	m²	60		
5.6.5		Glazed non-slip ceramic tiles to floor of Water treatment Building	m²	19		
5.6.6		White glazed ceramic tiles to internal wall at hand washing basin.	m²	2		
5.6.7		250-micron PVC sheet under surface bed to Water treatment Building	m²	18		
5.6.8			m²	18		
TOTAL CARRIED FORWARD						

Tenderer

Witness 1

Witness 2

Employer

Witness 1

Witness 2



Project No: 185527

**CONSTRUCTION OF BULK WATER SUPPLY AND STORAGE AT
HLALANIKAHLE & EXTENSION 5**

NKANGALA DISTRICT MUNICIPALITY

Schedule 5

BULK WATER SUPPLY AND STORAGE AT HLALANIKAHLE AND EXTENSION 5

Water Treatment Building

SCHEDULE 5: WATER TREATMENT BUILDING

ITEM NO	PAYM.REF.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
TOTAL BROUGHT FORWARD						
5.7.		DOORS AND WINDOWS				
5.7.1		2032 x 813 Standard single rebate framed, ledged and braced hardwood external door	No	4		
5.7.2		Type ND2 standard residential steel window frames, complete with 4mm thick clear glass and burglar bars	No	2		
5.7.3		Type NE1 standard residential steel window frames, complete with 4mm thick frosted glass and burglar bars	No	2		
5.7.4		Supply and install security gate to external access door	No	2		
6,8		ROOF TIMBERS AND FINISHES				
5.8.1		Howe Type Roof trusses manufactured from min SAP Grade 5 or better (CCA treated) , Galv. Gang nail plated joints, trusses spaced at max 1,2m c/c, 6,32mm wall c/c span. Include runners, rafters/purlins, bracing & wall pate.	m²	44		
5.8.2		0.58mm Thick class Z275 Global-tech CIS Super seal 500 roof sheeting finished in traffic green colour	m²	44		
5.8.3		6.4mm Thick gypsem ceiling board fixed on 38 x 38 brandering at 450mm centres with 38mm glass fibre insulation, complete, including 75mm coved gypsum cornice and painted	m²	18		
5.8.4		4mm Thick FC ceiling on 38x38mm SAP brandering, complete, and painted	m²	20		Rate only
5.8.5		125 x 100mm Galvanised gutter complete	m	2		
5.8.6		76mm Galvanised downpipes, complete with bends and	m	8		
5.8.7		300x15mm FC fascia boards, complete, and painted to Engineers specification	m	36		
6,9		ELECTRICAL INSTALLATION				
5.9.1		Provide for the electrical installation to water treatment building	Prov Sum			R 80 000.00
5.9.2		Mark-up by the Contractor on amount in Item5.9.1 for electrical installation to the water treatment building.	%	1		
5.10		MISCELLANEOUS				
5.10.1		Provide 4,5 kg fire extinguisher/protection to water treatment building.	No	4		
TOTAL SCHEDULE 5 CARRIED FORWARD TO SUMMARY						

Tenderer

Witness 1

Witness 2

Employer

Witness 1

Witness 2



Project No: 185527

**CONSTRUCTION OF BULK WATER SUPPLY AND STORAGE AT
HLALANIKAHLE & EXTENSION 5**

NKANGALA DISTRICT MUNICIPALITY

Schedule 6

BULK WATER SUPPLY AND STORAGE AT HLALANIKAHLE AND EXTENSION 5

Fencing Works

SCHEDULE 6: FENCING WORKS

ITEM NO	PAYM. REF.	LI	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
6.1	SANS 1200 C		<u>SITE CLEARANCE</u>				
6.1.1	8.2.1	LI	Clear vegetation and trees of girth up to 1 m for a strip of 5m wide	m ²	60		
6.1.2	8.2.2	LI	Remove and grub large trees and tree stumps of girth over 1 m	no	1		
6.2	SANS		<u>EARTHWORKS</u>				
6.2.1	8.3.1 b)		<u>Excavation in all materials and use for embankment or backfill or dispose, as ordered the engineer</u>				
		LI	a) Fencing posts, stays, corner posts, etc	m ³	3		
6.2	SANS 1200 GA		<u>CONCRETE:</u>				
6.2.1	8.4.3		<u>Grade 25/19 strength reinforced concrete in:</u>				
		LI	a) Fencing posts, stays, corner posts, etc	m ³	3		
6.3			<u>MISCELLANEOUS ITEMS:</u>				
6.3.1		LI	Clearview fencing, 1,8m high complete zinc coating, fully Galvanised	m	60		
6.3.2		LI	730mm Razor wire concertina coil on top of the fencing, complete with all posts, stays, wires etc	m	60		
6.3.3		LI	Clearview sliding vehicle access gate, clear width 6m, 1,8m high complete with support posts, track, locking mechanism etc	No	1		
TOTAL SCHEDULE 6 CARRIED FORWARD TO SUMMARY							

Tenderer

Witness 1

Witness 2

Employer

Witness 1

Witness 2



NKANGALA DISTRICT MUNICIPALITY						Schedule 7	
BULK WATER SUPPLY AND STORAGE AT HLALANIKAHLE AND EXTENSION 5						Dayworks	
SCHEDULE 7 : DAYWORKS (Provisional)							
ITEM NO.	PAY M. REF.	LI	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
7			Dayworks Labour				
7.1			Contractor's Representative	hr	40		
7.1.1				hr	16		
7.1.2			Surveyor	hr	40		
7.1.3			Qualified artisan	workday	5		
7.1.4			Foreman, leader-hand (9 hr/workday)	workday	10		
7.1.5			Semi-skilled labourer (9 hr/workday)	workday	30		
7.1.6			Labourer (9 hr/workday)				
7.2			Plant hire : Work Rates on Site				
7.2.1			<u>Tipper truck (specify capacity)</u> a) 5m ³ (small)	hr	27		
7.2.2			<u>Flat bed truck (specify capacity)</u> a) 5 ton (small)	km	250		
7.2.3			LDV	km	250		
7.2.4			Wheel loader: m ³ bucket (specify type)	hr	40		
7.2.5			<u>Bull dozer</u> a) m ³ (small)	hr	27		
7.2.6			<u>TLB (Tractor Loader Backhoe)</u> (..... m ³ bucket) (specify type)	hr	27		
7.2.7			<u>Compactor</u> a) (specify applied force) kg	hr	27		
7.2.8			<u>Concrete mixer (specify dry/wet capacity)</u> a) (small towable)	hr	45		
7.2.9			<u>Miscellaneous</u> a) Compressor with capacity of ± 10m ³ /min b) Water pump with 80mm outlet - diesel driven	hr hr	45 45		
TOTAL SCHEDULE 7 CARRIED FORWARD TO SUMMARY							

Tenderer

Witness 1

Witness 2

Employer

Witness 1

Witness 2



NKANGALA DISTRICT MUNICIPALITY

BULK WATER SUPPLY AND STORAGE AT HLALANIKAHLE AND EXTENSION 5

SUMMARY TO THE BILL OF QUANTITIES

SCHEDULE	DESCRIPTION	AMOUNT
1	Preliminary & General	R -
2	Pipeworks	R -
3	Boreholes	R -
4	Sectional Steel Tank	R -
5	Water Treatment Building	R -
6	Fencing	R -
7	Dayworks (Provisional)	Rate Only
SUB TOTAL A		R -
Allow 10% of Sub Total A for Contingencies to be used at the discretion of the Employer and deducted in whole or in part if not required		R -
SUB TOTAL B		R -
VAT @ 15% of Sub Total B		R -
TOTAL OF PRICES INCLUDING VAT CARRIED OVER TO THE FORM OF OFFER		R -

Tenderer

Witness 1

Witness 2

Employer

Witness 1

Witness 2